

# Dr. Artur Marchewka

Head of the Laboratory of Brain Imaging at the Neurobiology Centre, Nencki Institute of Experimental Biology, the Polish Academy of Sciences ([www.lobi.nencki.gov.pl](http://www.lobi.nencki.gov.pl)). Graduated in psychology from the University of Warsaw. Awarded doctoral degree in the field of neurophysiology from the Nencki Institute of Experimental Biology, Polish Academy of Sciences. Served a twelve-month fellowship at the University Hospital in Lausanne (UNIL-CHUV).

DURATION OF THE SCIEX PROJECT:  
**1.05.2010 – 30.04.2011**

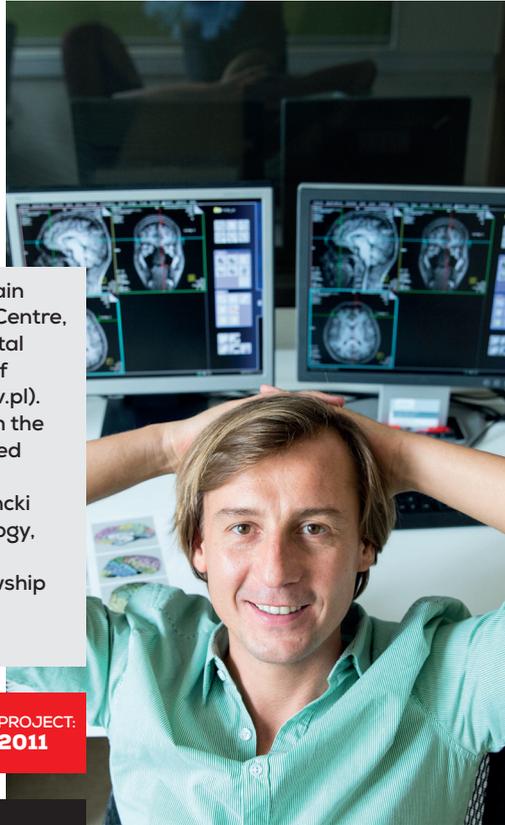
PROJECT:  
**AIAD – Advanced  
Imaging in Alzheimer's  
disease**

Nencki Institute  
of Experimental  
Biology, the Polish  
Academy of  
Sciences

PL

CH

Lausanne  
University  
Hospital



## What was the objective of your project implemented as part of the SCIEX programme?

The project focussed on the methodology of brain structure research using MRI in Alzheimer disease patients. We researched the way in which brain structure scans could be used to diagnose the disease before the onset of its behavioural symptoms.

## What were the outcomes of the project?

We proved in our publication that brain structure-related data and voxel-based morphometry make it possible to analyse information coming from different scanners and centres. We proved that this method could be used for different sources, which allows us to draw conclusions relating to the whole population regardless of the country from which such data comes. It is also possible to demonstrate the whole spectrum of the disease. We can also share data – the Human Brain Project is one of the platforms that serve this purpose.

## What impact did the fellowship have on your professional and private life?

There are lots of advantages impacting various aspects of my life. Professionally – the opportunity to work with eminent scientists and meet people being specialists in their domain was truly invaluable. It is owing to those new contacts that together with LREN (*Laboratoire de Recherche en Neuroimagerie* in Lausanne) we now have a joint project entitled Harmonia NCN. I am not the only one to have benefited from the fellowship – a student of mine is currently serving a placement in Geneva at Prof. Patrick Vuilleumier's laboratory.

In Switzerland, I was exposed to a completely new way of approaching science, running a laboratory and cooperating with others. I worked in an environment whose academic standards were exceptionally high. I am trying to make use of this experience in my current job. During my fellowship period I learnt basic French – a language that I had never studied before. That was quite a cultural challenge not directly related to work as we used English in the lab. I became familiar with Switzerland – a perfectly organised country, good to live and work in and a good place to conduct scientific activity. In my leisure I used to cycle around the country doing some sightseeing and I skied. I made new acquaintances, even friends.

## If not for the fellowship...

...I would not have achieved what I have now and my academic career would have developed in a completely different way. The experience gained thanks to the fellowship helped me win the competition for the post of the Head of the Laboratory of Brain Imaging at the Nencki Institute of Experimental Biology of the Polish Academy of Sciences. I am of the opinion that such mobilities should be compulsory after the presentation of a PhD thesis as they shape one's research work for many years to come. I think that any situation where somebody's whole academic career is tied to just one institution must be seen as something downright anachronistic today.